

that their relationship to the Caracaras is not more intimate than to the eagles and the hawks.

Similarly, the American Vultures, or *Cathartidae*, if they are vultures at all, which is extremely improbable, can hardly be included in the same family with their typically accipitrine namesakes, but must be placed independently by themselves. The conformation of the feet alone, and more especially the difference in the proportionate length of the phalanges pointed out by Prof. Huxley, is alone sufficient to decide this point.

Leaving these minor points out of the question, however, as having little or no bearing on the true value of the whole, we look on the volume before us as the precursor of others, which if all completed in the same thorough and able manner that is throughout manifested in the first, will form a standard ornithological work, the importance of which it will be impossible to over-estimate. We wish Mr. Sharpe all success in the further prosecution of his almost herculean task.

OUR BOOK SHELF

1. *The Principal Timber Trees.* 2. *Select Plants (exclusive of timber trees).* 3. *Additions to the Lists of the principal Timber Trees and other Select Plants readily eligible for Victorian Industrial Culture.* By Baron Ferd. von Mueller. (Melbourne.)

THESE papers, drawn up by Baron Mueller, and first published in the Proceedings of the Zoological and Acclimatisation Society of Victoria, are something more than mere lists, inasmuch as in their separate pamphlet form, in which form they have all since been issued, the first occupies 58 pp. 8vo, and was issued in 1871; the second, 428 pp. 8vo, issued in 1872; and the third, the "Additions," 40 pp. 8vo, issued only a month or two since, and only just come to hand.

It is not on account of any original observation being made into the properties or uses of the trees or plants enumerated that we think these papers worthy of notice, but rather on account of their practical use in imparting to an unscientific colonist a knowledge, not only of such trees and other plants as may grow in the climate, but also of their value in an economic or commercial point of view. By means of a pamphlet like either of the above, we have ready references to plants, natives of nearly every part of the globe, which are, moreover, with some authority considered suitable for acclimatisation in Australia and other countries. Such information as the geographical distribution, habit of the plant, &c., could only be obtained by reference to the numerous Floras and bulky botanical works which are as sealed books to the colonists generally, while the economic applications would have to be sought for in numerous other and totally distinct works, for our Colonial Floras seldom or never even touch on this important part of the subject. Baron Mueller, indeed, says that these lists are intended not so much to contain records of original research as "to bring together information more condensed and more recent than would be attainable in costly or voluminous works of even several languages."

The arrangement of the genera is alphabetical instead of being scientific, and the following examples will show the sort of information given:—

"*Buxus semper-virens* L.—The Turkey Box Tree. South Europe, North Africa, South-west Asia. This slow-growing tree should be timely planted to provide the indispensable box-wood for wood-engravers and musical instrument makers, as yet no good substitute for it having been discovered. The box tree needs calcareous soil for its

best development. Among allied species, *B. balearica* attains a height of eighty feet."

Then follows a list of other species of *Buxus*, about which, however, little is known as to the value of the respective woods. Here is another example, taken haphazard:—

"*Guevina avellana* Molina.—Extends from Middle Chili to the Chonos Archipelago. Briefly alluded to already in the list of trees desirable for Victorian forest culture. One of the most beautiful trees in existence. The snowy white flower-spikes produced simultaneously with the ripening of the coral-red fruit. In the cooler southern regions the tree attains considerable dimensions. The wood, tough and elastic, used for boat-building. The fruit of the allied *Brabejum stellatifolium* can only be utilised with caution in a roasted state as an article of diet, because it is noxious, or even absolutely poisonous, in a raw state."

Guevina avellana is a Proteaceous tree, the fruits of which are very similar in appearance, and the seeds very similar in flavour, to those of the Australian tree *Macadamia ternifolia*. These lists will probably prove useful not only as a guide to the selection of plants for the purposes of acclimatisation, but also as a handy reference for economic species generally.

J. R. J.

LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. No notice is taken of anonymous communications.]

A Remarkable Thunderstorm

[The following letter has been forwarded to us for publication by Mr. R. H. Scott, F.R.S.—ED.]

"Yorkshire Philosophical Society,

York, Sept. 2, 1874.

"Dear Sir,—I have to report to-day one of the most unusual thunderstorms that I ever remember. It began to be dark about 12.30 noon, and rain fell; at 12.40 it was much darker; at 12.43 rain fell in torrents, but was so much driven by the wind that you saw it being driven like snow in packs; so dense was it now and for ten minutes that I could not see chimney-pots 100 yards distant. The thermometer must have fallen tremendously, for windows were so steamed inside as to be opaque. I remarked that the clouds went in the direction of N.W., while the wind was S.S.W., and force about 8. Part of the time it went in whirlpools, as it were; during the climax of ten minutes we had rain with lightning and thunder, then snow, and snow and sleet, and distinct hail afterwards, but not of large size.

"I should have taken the state of the instruments, but I was about half a mile from the museum.—I am, &c.,

(Signed)

"C. WAKEFIELD

"R. H. Scott, Esq., F.R.S.,

"Director, Meteorological Office.

"P.S.—Rain measures '49. There was lightning (a little forked, the rest sheet) and thunder during all the storm."

The Exhibition of Specimens and Apparatus at the British Association

IF no one else has already done so, will you permit me to call attention to the valuable feature of the Belfast meeting of the British Association presented by the exhibition of specimens, apparatus, and diagrams in the Anatomical Museum, due, it is understood, to the energy and perseverance of Mr. Ray Lankester. Here were to be seen, for instance, Mr. Symons's series of thermometers illustrating variations in sensibility, a collection of bones and other remains found in Kent's Hole and the Victoria Cave, during 1873-74, Dr. Pye Smith's large undescribed Medusa, the diagrams and plants which illustrated Dr. Hooker's address on Carnivorous Plants, specimens of breech-loading fire-arms, and many other objects of interest, all catalogued in each day's issue of the "Journal." It is to be hoped that a similar collection, rendered still more complete through the co-operation of the authors of papers, will be an addition to the attractions of all future meetings of the Association.

Penmaenmawr, Sept. 4

ALFRED W. BENNETT